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Recreational Mail Surveys, 1989 - Tidal Sportfishing Diary Program and Visitors Sportfishing Survey

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December, 1990

Canadian Manuscript Report of Fisheries and Aquatic Sciences No. 2092

Fisheries and Oceans Pêches et Océans

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Fisheries and Aquatic Sciences 2092

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by

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92-01695/

RECREATIONAL MAIL SURVEYS, 1989 - TIDAL SPORTFISHING DIARY PROGRAM AND VISITORS SPORTFISHING SURVEY

PREFACE

The Tidal Sportfishing Diary Prcgram was initiated in 1979 to obtain estimates of the sport catch by B.C. residents fishing in B.C. tidal waters. The Visitors Sportfishing Survey was first conducted in 1982 to obtain estimates of sport catch and expenditures by visitors fishing in B.C. tidal waters. Previous reports cover survey development and annual results. This report serves as a continuation of this series and deals with the 1989/90 results. Catch estimates are presented in these reports as survey results and are not necessarily the accepted numbers for all species and areas.

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Correct citation for this publication:

Bijsterveld, L. 1990. Recreational mail surveys, 1989 - Tidal Sportfishing Diary Program and Visitors Sportfishing Survey. Can. Manuscr. Rep. Fish. Aquat. Sci. 2092: vi + 31 p.

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RECREATIONAL MAIL SURVEYS, 1989 - TIDAL SPORTFISHING DIARY PROGRAM AND VISITORS SPORTFISHING SURVEY

ABSTRACT

Bijsterveld, L. 1990. Recreational mail surveys, 1989 - Tidal Sportfishing Diary Program and Visitors Sportfishing Survey. Can. Manuscr. Rep. Fish. Aquat. Sci. 2092: vi + 31 p.

Mail surveys collected 1989/90 licence year catch and effort data on recreational fishing in B.C. tidal waters. During 2,199,000 angler days, adult anglers caught and kept 1,978,000 salmon including 524,000 chinook and 1,101,000 coho. Problems related to mail surveys are reviewed.

Keywords: sportfishing, tidal waters, logbook, mail survey. catch statistics

RESUME

Bijsterveld, L. 1990. Recreational mail surveys, 1989 - Tidal Sportfishing Diary Program and Visitors Sportfishing Survey. Can. Manuscr. Rep. Fish. Aquat. Sci. 2092: vi + 31 p.

Lors d'enquêtes par correspondance, on a recueilli des données sur les efforts et les prises pour la saison de pêche récréative 1989-1989 dans les eaux de marée en C.-B. Pendant 2,199,000 jours-pêcheurs, les pêcheurs adultes à la ligne ont capturé et gardé 1,978,000 saumons dont 524,000 saumons chinook et 1,101,000 saumons coho. Les problèmes reliés aux enquêtes par correspondance sont l'étude.

Mots clés: pêche sportive, eaux de marée, journal de bord, enquête par correspondance, statistiques sur les prises.

RECREATIONAL MAIL SURVEYS, 1989 - TIDAL SPORTFISHING DIARY PROGRAM AND VISITORS SPORTFISHING SURVEY

INTRODUCTION

The Tidal Sportfishing Diary Program is a mail survey of resident B.C. tidal water anglers. The Diary Program was introduced in 1979 as a method of estimating recreational catch and effort. It was necessary to survey large numbers of B.C. adults in order to contact anglers in the absence of a licencing program. The B.C. Tidal Waters Sport Fishing Licence, introduced during 1981, identified anglers and provided a sample base for the program beginning in 1982. The licences also provide a sample base for anglers visiting B.C. The Visitors Sportfishing Survey was first conducted in 1982 to obtain estimates of sport catch and expenditures by anglers visiting B.C. during the previous year. The 1981 and 1982 licence years corresponded to calendar years (January 1 to December 31). The 1983 licence year was a transition from a calendar year to a fiscal year (April 1 to March 31) and extended from January 1, 1983 to March 31, 1984. The 1983 Diary program and Visitors Survey covered the entire 15 month period although only the 1983 calendar year statistics were published. The 1989/90 population and catch and effort statistics correspond to the 1989/90 licence year (April 1, 1989 - March 31, 1989).

METHODOLOGY

A systematic sample of 39,000 1988/89 B.C. Tidal Waters Sport Fishing Licences was drawn. The licence information was keyed directly from the licence stubs into a computer to produce an address list. The B.C. addresses were used for the Diary Program while the remainder were used for the Visitors Sportfishing Survey.

Tidal Sportfishing Diary Program

In 1989/90, the Diary Program was conducted as follows: semi-monthly, a new sample or panel of 1,400 licence holders was mailed a diary form covering a full "month". Half of the panels were responsible for recording fishing activity for a calendar month, the other half for an interval from the middle of one month to the middle of the next. Data for the first half of the "month" was filled in from memory; data for the second half was filled in as anglers fished. Diarists were provided with addressed postage paid envelopes for returning the survey forms. Drawings of the 5 salmon species and lingcod, rockfish and halibut were included to aid identification. Reminders were sent to all panel members at the end of the "month".

The data from returned diaries was entered into a computer. A program checked the data during entry to prevent duplicate entries and to ensure that the areas, months, types of fishing and daily catches were valid. Invalid information was not used for estimation of catch and effort. Diaries received more that one month after the last date of the diary "month" were considered to be late and were not used.

Visitors Sportfishing Survey

Three thousand questionnaires were sent to visiting North American anglers (excluding B.C.) at the end of the licence year. Reminders were sent to questionnaire nonrespondents four weeks after the initial sendout. Questionnaire recipients were asked about their fishing activity in B.C. during the 1989/90 licence year.

The data from returned surveys was entered into a computer. A program checked the data during entry to prevent duplicate entries and to ensure that the areas, months, and daily catches were valid. Invalid information was not used for estimation of catch and effort. Surveys received more that one month after the reminder sendout were considered to be late and were not used.

RESULTS

Returns

The number of diary returns for each panel of the 1989/90 Diary Program is provided in Table 1. The percentage of anglers returning diaries and fishing during each diary period varies throughout the year, as shown in Table 1. During the entire year, 40% of the anglers contacted returned diaries. Fourteen percent of those returning diaries actually fished. The response rate appears lower than in previous years (Table 2). The percentage returned was higher but some returned surveys were misplaced and were not available for analysis. In addition, Canada Post changed its standards for business mail and insisted that postal codes be present on all outgoing mail. This affected the number of undeliverables for some batches.

Three thousand questionnaires were sent out for the 1989/90 Visitors Survey. The return rate for the Visitors Survey was 67%.

Resident Sportfishing Population

The estimated number of B.C. resident adult anglers in 1989/90 is provided in Table 3. The population is estimated using the proportion of B.C. anglers in the licence sample and the total licence sales. The population consists of adult B.C. resident tidal water anglers, aged 16 and over. Characteristics of the population of licence holders can be estimated from the sample. Males account for 79% of the population of licence holders while females account for 21% (Figure 1). The population of B.C. adults, by comparison, is composed of almost equal numbers of males and females (Statistics Canada 1990).

The age composition of the B.C. adult population is presented in Figure 2. The proportion of individuals between 26 and 64 years of age is higher among licenced anglers than among B.C. adults in general. More young adults and people 65 years of age and over are present in the total population of adults (Statistics Canada 1990).

TABLE 1

DIARY RETURNS - 1989/90

Panel Period	Undeliverable	Total Possible Response	Number of Respondents	Adjusted Response (%)	% That Fished
1989					
Apr 01 - Apr 30	152	1,248	612	49	4
Apr 16 - May 15	199	1,201	623	52	8
May 01 - May 31	186	1,214	620	51	12
May 16 - Jun 15	190	1,210	559	46	20
Jun 01 - Jun 30	165	1,235	609	49	23
Jun 16 - Jul 15	149	1,251	697	56	26
Jul 01 - Jul 31	182	1,218	436	36	30
Jul 16 - Aug 15	188	1,212	264	22	34
Aug 01 - Aug 31	198	1,202	231	19	41
Aug 16 - Sep 15	208	1,192	286	24	37
Sep 01 - Sep 30	263	1,137	251	22	42
Sep 15 - Oct 16	238	1,162	309	27	30
Oct 01 - Oct 31	218	1,182	362	31	23
Oct 15 - Nov 16	231	1,169	367	31	11
Nov 01 - Nov 30	220	1,180	438	37	7
Nov 15 - Dec 16	230	1,170	484	41	5
Dec 01 - Dec 31	216	1,184	550	46	5
Dec 15 - Jan 16/90	357	1,043	568	54	5
1989					
Jan 01 - Jan 31	241	1,159	580	50	4
Jan 15 - Feb 16	257	1,143	583	51	4
Feb 01 - Feb 28	300	1,100	522	47	3
Feb 15 - Mar 16	266	1,134	493	43	2
Mar 01 - Mar 31	299	1,101	474	43	3
Mar 15 - Apr 16	232	1,168	470	40	7
TOTAL	5,385	28,215	11,388	40	14

TABLE 2

ANNUAL DIARY RETURNS 1985 - 1989

Diary Year	Undeliverable	Total Possible Response	Number of Respondents	Adjusted Response (%)	% That Fished
1985/86	1,149	7,601	4,361	57	15
1986/87	1,881	14,659	7,935	54	16
1987/88	4,340	24,603	14,050	57	14
1988/89	4,280	29,320	15,398	53	13
1989/90	5,385	28,215	11,388	40	14

TABLE 3

ESTIMATED POPULATION OF B.C. RESIDENT ANGLERS

Year	Number of Anglers
1981	203,000
1982	223,000
1983/84	224,000
1984/85	225,000
1985/86	239,000
1986/87	242,000
1987/88	240,000
1988/89	237,000
1989/90	251,000

The distribution of B.C. licenced anglers by area of residence is presented in Figure 3. Over 75% of licenced anglers are from Vancouver Island and the Greater Vancouver area. Eight percent of B.C. adults purchased a Tidal Waters Sport Fishing Licence in 1989. As expected, this percentage was higher in coastal areas as shown in Figure 3.

Population of Visiting Anglers

The estimated number of anglers visiting B.C. in 1989/90 is presented in Table 4. The sex composition of the population of visiting anglers is similar to the composition of B.C. resident anglers. Males account for 80% of the visiting population and females account for 20%.

The age composition of the population of visiting anglers is presented in Figure 2. The proportion of individuals over the age of 35 is higher among visiting anglers than among B.C. resident anglers.

Americans accounted for 68% of the visiting anglers while Canadians accounted for 28%. The remaining 4% of the visiting anglers originated from outside North America. The proportions of visiting anglers by country of origin are presented in Figures 4 and 5.

TABLE 4

ESTIMATED POPULATION OF VISITING ANGLERS

	Country of Origin			
Year	Canada	U.S.A.	Other	Total
1981	32,300	43,100	3,600	79,000
1982	28,700	40,900	1,500	71,100
1983/84	30,300	42,600	2,000	74,900
1984/85	25,700	51,600	300	74,900
1985/86	27,200	63,600	2,600	77,600
1986/87	44,800	61,300	3,900	110,000
1987/88	33,200	71,100	4,200	108,500
1988/89	34,000	70,100	5,000	109,100
1989/90	31,200	76,600	4,300	112,100

FIGURE 1

SEX COMPOSITION OF B.C. ADULTS, ANGLERS AND VISITING ANGLERS - 1989/90

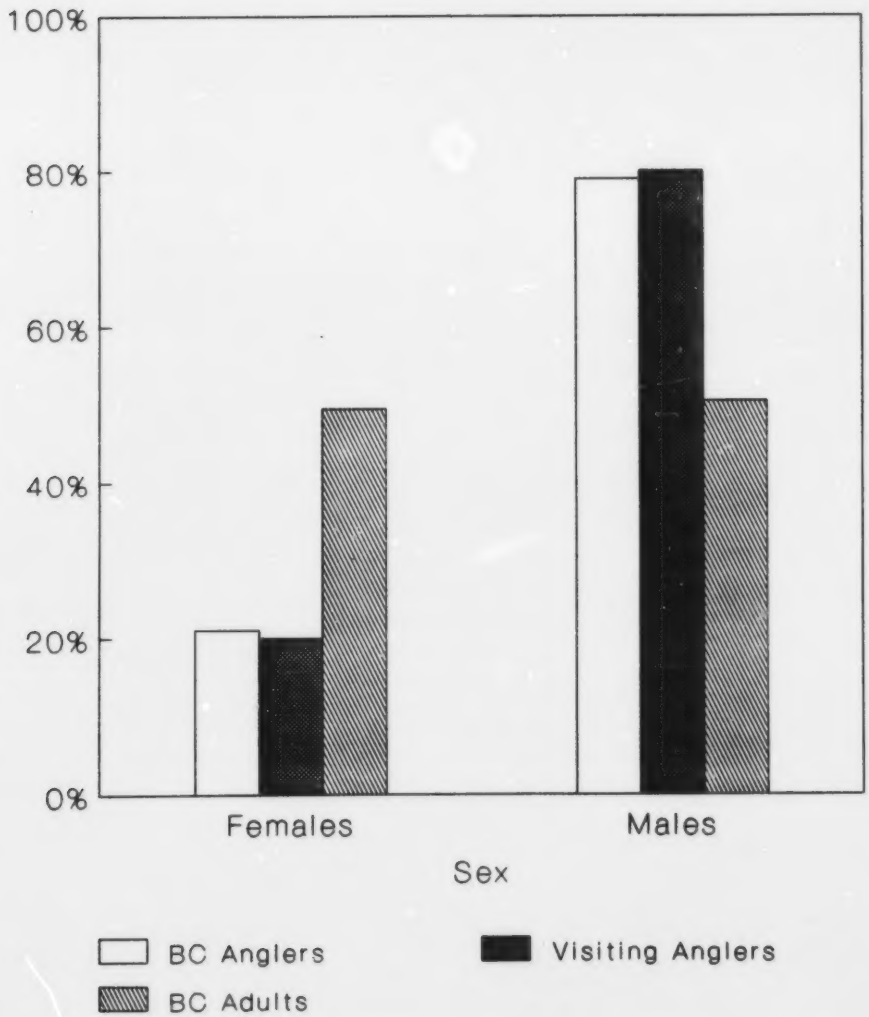


FIGURE 2

AGE COMPOSITION OF B.C. ADULTS, ANGLERS AND VISITING ANGLERS - 1989/90

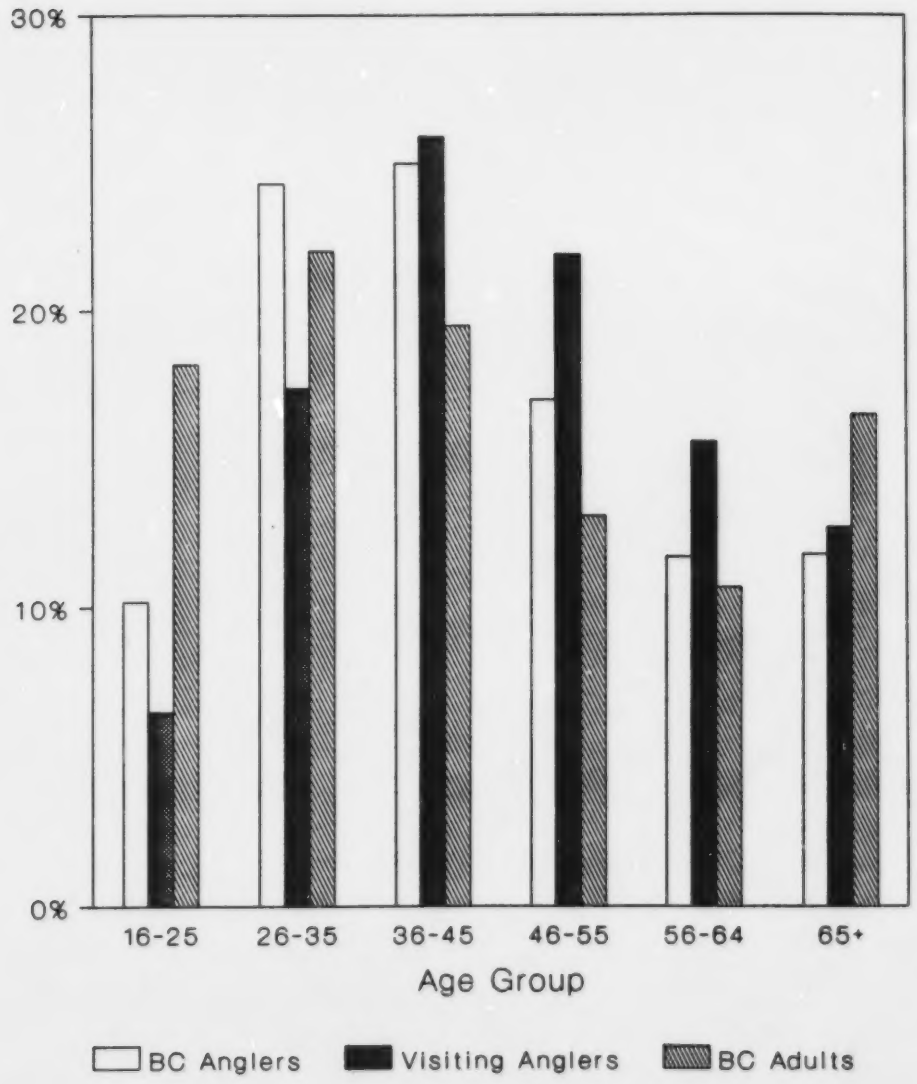


FIGURE 3

DISTRIBUTION OF B.C. RESIDENTS AND LICENCED ANGLERS BY REGION - 1989/90

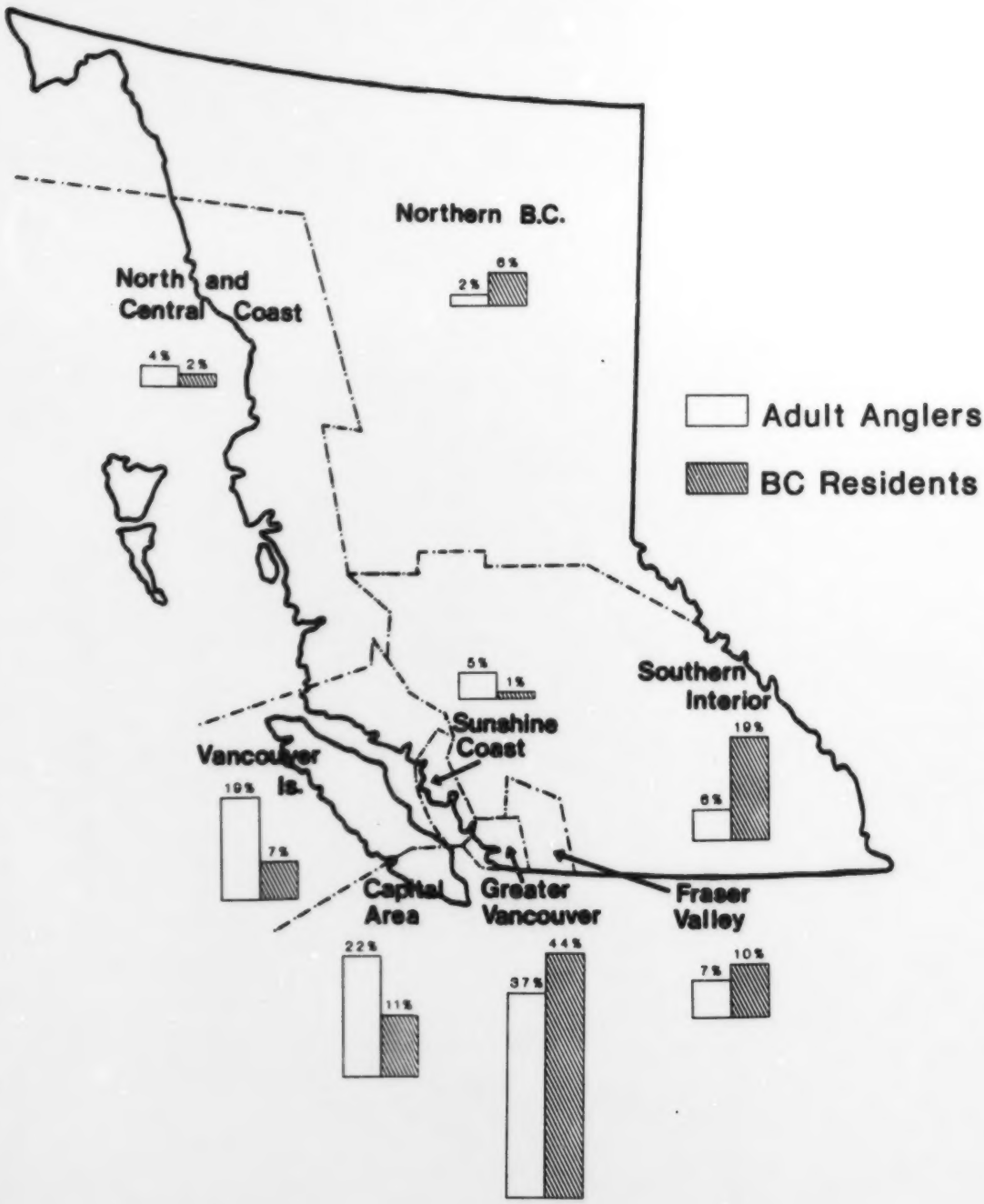
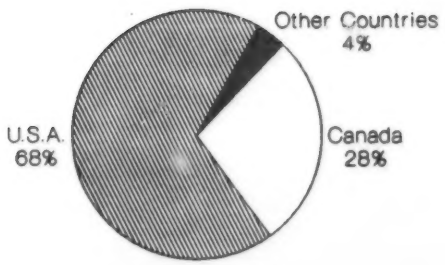


FIGURE 4

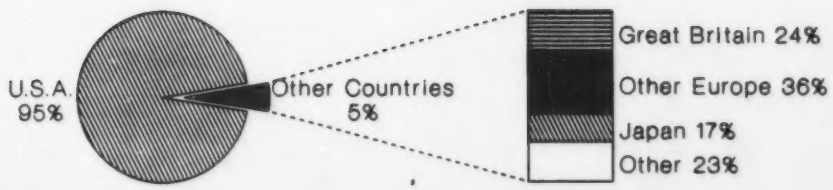
COMPOSITION OF VISITING ANGLER POPULATION - 1989/90

All Visiting Anglers
1989/90



Total Visiting Anglers

NonCanadian Anglers
1989/90



Total NonCanadian Anglers

Other Countries

Catch

British Columbia resident and visiting angler catches are presented in Table 5 and Table 6, respectively. The combined catch by B.C. resident and visiting anglers is presented in Table 7.

Most of the salmon were caught between Vancouver Island and the mainland. This area accounted for 83% of the total salmon, including 68% of the chinook and 87% of the coho caught and kept by B.C. resident anglers in 1989/90. This area contributed a smaller proportion (68%) of the total salmon caught by visiting anglers.

Almost 80% of the rockfish and lingcod caught by residents were taken from waters between Vancouver Island and the mainland. About 70% of the lingcod and the rockfish caught by visitors were taken from this area. Most (59%) of the halibut caught by B.C. residents were taken from waters north of Vancouver Island. Almost half (48%) of the halibut catch by visitors was taken from waters west of Vancouver Island.

Effort

British Columbia resident anglers fished an estimated 1.7 million days in 1989/90. Visiting anglers fished an estimated 516,000 days in B.C. tidal waters in the 1989/90 licence year, bringing the total tidal water estimate of effort to 2.2 million days during the 1989/90 licence year. More than 90% of the finfish effort by B.C. resident anglers occurrs from boats. Most of the combined effort (81%) by residents and visitors occurs between Vancouver Island and the mainland.

TABLE 5

1989/90 CATCH[1] AND EFFORT[1] BY REGION FOR B.C. RESIDENT ANGLERS

Region	Days Fished	Chinook	Coho	Pink Salmon	Other Salmon	Total Salmon	Lingcod	Rockfish	Halibut
North Coast (Areas 1- 6)[2]	76.1	31.1	21.6	6.9	0.7	60.3	11.5	35.3	12.7
Central Coast (Areas 7-11)[2]	24.4	7.7	19.0	4.7	0.3	31.7	7.9	24.8	2.0
E. Vancouver Is. (Areas 12-14)[2]	532.0	96.0	436.3	103.8	6.7	642.8	66.4	80.7	1.5
Sunshine Coast (Areas 15-16)[2]	205.8	35.8	68.3	0.0	1.1	105.2	29.4	102.8	0.7
S. Vancouver I (Areas 17-20)[2]	490.2	99.7	210.3	123.1	15.6	448.7	30.3	154.0	3.3
W. Vancouver I (Areas 21-27)[2]	173.8	80.6	67.0	3.8	6.1	157.5	13.1	34.5	3.5
Lower Mainland (Areas 28-29)[2]	180.2	18.4	22.3	17.9	3.9	62.5	3.0	18.7	1.3
Total B.C.[3] (Areas 1-29)[2]	1,682.5	369.3	844.8	260.2	34.4	1,508.7	161.6	450.8	25.0

[1] Catch is reported as thousands of fish kept and effort is reported as thousands of days fished.

[2] Department of Fisheries statistical areas as indicated on the map in Appendix B.

[3] Totals may not equal the sum of the regions due to rounding.

TABLE 6

1989/90 CATCH[1] AND EFFORT[1] BY REGION FOR VISITING ANGLERS

Region	Days Fished	Chinook	Coho	Pink Salmon	Other Salmon	Total Salmon	Lingcod	Rockfish	Halibut
North Coast (Areas 1- 6)[2]	32.1	14.8	8.1	3.3	0.6	26.8	1.9	7.0	2.0
Central Coast (Areas 7-11)[2]	20.6	4.9	5.3	2.6	0.4	13.2	1.7	5.0	0.8
E. Vancouver Is. (Areas 12-14)[2]	271.0	61.9	154.8	31.8	4.5	253.0	31.2	69.8	1.5
Sunshine Coast (Areas 15-16)[2]	36.1	6.9	16.8	0.5	0.0	24.2	6.1	25.7	0.3
S. Vancouver Is. (Areas 17-20)[2]	46.7	11.0	20.3	7.1	1.1	39.5	4.7	22.8	4.3
W. Vancouver Is. (Areas 21-27)[2]	99.6	53.7	49.7	3.3	1.6	108.3	16.9	44.6	8.1
Lower Mainland (Areas 28-29)[2]	10.1	1.5	1.5	0.8	0.2	4.0	2.3	5.3	0.0
Total B.C.[3] (Areas 1-29)[2]	516.2	154.7	256.5	49.4	8.4	469.0	64.8	180.2	17.0

[1] Catch is reported as thousands of fish kept and effort is reported as thousands of days fished.

[2] Department of Fisheries statistical areas as indicated on the map in Appendix B.

[3] Totals may not equal the sum of the regions due to rounding.

TABLE 7

1989/90 B.C. TIDAL WATER SPORT CATCH[1] AND EFFORT[1] (000'S)

	B.C. Resident Anglers[2]	Visiting Anglers[3]	Total[4]
Angler Days	1,682.5	516.2	2,198.8
Chinook	369.3	154.7	523.8
Coho	844.8	256.5	1,101.2
Pink Salmon	260.2	49.4	309.7
Other Salmon	34.4	8.4	42.9
Total Salmon	1,508.7	469.0	1,977.6
Lingcod	161.6	64.8	226.4
Rockfish	450.8	180.2	631.1
Halibut	25.0	17.0	42.0

[1] Catch is reported as thousands of fish kept and effort is reported as thousands of days fished.

[2] Tidal Sportfishing Diary Program

[3] Visitors Sportfishing Survey

[4] Totals may not equal the sum of the two surveys due to rounding.

TABLE 8

B.C. TIDAL WATER SALMON SPORT CATCH[1] AND EFFORT[1] (000'S)
1985 - 1989

	1985/86	1986/87	1987/88	1988/89	1989/90
Effort					
Angler Days	2,237.8	2,194.8	1,837.9	1,715.0	2,198.8
Catch					
Chinook	513.2	474.6	353.3	279.3	523.8
Coho	1,092.5	1,325.1	982.6	1,367.3	1,101.2
Other Salmon	294.9	131.9	256.5	188.1	352.6
Total Salmon	1,900.6	1,931.6	1,592.4	1,834.7	1,977.6
Lingcod	NA	275.9	228.1	203.4	226.4
Rockfish	NA	602.2	467.3	555.6	631.1
Halibut	NA	26.0	21.2	33.8	42.0
Salmon Catch per Unit Effort					
Chinook	.23	.22	.19	.16	.24
Coho	.49	.60	.53	.80	.50
Total Salmon	.85	.88	.87	1.07	.90

[1] Catch is reported as thousands of fish kept and effort is reported as thousand of days fished.

Catch and Effort by Juvenile Anglers

A Tidal Waters Sport Fishing Licence for juvenile anglers (age 15 and under) was introduced as part of the 1988/89 licence system. The population of juvenile anglers by residence can be estimated from juvenile licence sales and a sample of licences providing residence information. In 1989/90, there were 46,100 B.C. juvenile anglers and 11,900 visiting juvenile anglers, estimated using licence sales and sample information.

Other surveys (Cox 1977; Cumming 1979; Pelletier, Lacasse and Ducharme 1981; Thomson 1974) indicate that the average number of days fished by resident juvenile anglers is one-third to two-thirds the average number of days fished by their adult counterparts. Juvenile resident effort is estimated using the assumption that each juvenile resident angler fishes half as many days as an adult resident.

Results of previous Visitors Surveys (James 1986; James 1985) indicate that the majority of visiting anglers come to the province to fish or for a vacation. Juvenile visiting anglers would probably be members of families on fishing trips or vacations. These juveniles would be more likely to fish than would resident juveniles. The assumption is, therefore, that visiting juveniles fish proportionally more than resident juveniles but less than visiting adults. It is assumed that visiting juveniles fish 75% the number of days fished by visiting adults.

The catch by juvenile anglers is estimated to be the effort by juvenile anglers multiplied by the catch rates for adult anglers. It is assumed that juvenile anglers generally fish with and are assisted by adults so the catch rates are equal. The catch and effort for juvenile anglers is presented in Table 9. These numbers are not included in the previously discussed catches by adult anglers.

TABLE 9

1989/90 SPORT CATCH AND EFFORT BY ADULT AND JUVENILE ANGLERS

Type of Angler	Number of Anglers	Angler Days	Chinook	Coho
Adults:				
B.C. Residents	251,000	1,682,500	369,300	844,800
Visitors	112,100	516,200	154,700	256,500
Total Adults[1]	363,100	2,198,800	523,800	1,101,200
Juveniles:				
B.C. Residents	46,100	154,500	34,000	77,300
Visitors	11,900	41,100	12,300	20,600
Total Juveniles	58,000	195,600	46,300	97,900
TOTAL ANGLERS	421,100	2,394,400	570,100	1,199,100

DISCUSSION

Nonresponse Bias

Certain types of error are associated with any type of survey. One type of error is referred to as nonresponse and may result from the failure to measure or contact the entire survey sample (Cochrane 1977). Biased measurements could be obtained if the characteristics of the measured group differ from the group not measured. Individuals that voluntarily return questionnaires as part of a mail survey are possibly more interested in the questionnaire subject and could differ from those who don't return questionnaires. Tidal Diary respondents could be more active and successful anglers than nonrespondents. Estimates of fishing activity from this source alone could be biased upwards.

Nonrespondents were surveyed by telephone as part of the 1987/88 Diary program. Survey results indicate that 73% of the nonrespondents fished compared to 74% of the respondents. A chi-square test indicated no difference between these participation rates at the .05 level of significance. Nonrespondents reported fishing more days and catching more salmon, on the average, although these differences are not significant as indicated by t-tests at the .05 level of significance. Catch per angler day (CPUE) can be considered to be a measure of fishing success. The chinook and coho CPUE for respondents were higher but not significantly so as indicated by t-tests at the .05 level of significance. Therefore, the hypothesis that nonrespondents were as successful as the respondents was accepted.

Recall Bias

Another source of error is recall bias that arises when individuals cannot always accurately recall details after time has passed. The result could be either under or over estimating, depending on the subject. The magnitude of the error could increase with time. This type of bias can be a problem in postseason mail surveys such as the Visitors Survey when the recall period is long. Diary program participants, however, are asked to recall the last half month only and keep records as they fish for the remainder of the month. For each half month, a recalled set of data and a current set of data are collected. Recalled and current data were compared for the 1985 through 1988 programs. Generally, the average catch and effort was higher for recalled data than for current data. The differences between

the recalled and current data were not significant as indicated by analyses of variance at the .05 level of significance.

Diaries received more that one month after the last date of the diary "month" are considered to be late and are not used for catch and effort estimation. The purpose of this exclusion is to eliminate information recalled over a longer period of time and reduce the possible effects of recall bias.

Inaccurate Reporting

Error can also result from inaccurate reporting by the respondents. Drawings of the required fish with identification points were supplied to all of the diarists to assist in correct species identification. During data entry, a computer program checked the catches against valid daily limits. Catches over the limit were were not used for catch estimation because the the catch could have been identified incorrectly or the reported catch could have been for the fishing party rather than for the individual angler.

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APPENDIX A

SPECIES LIST
COMMON AND SCIENTIFIC NAMES OF FISH RECORDED

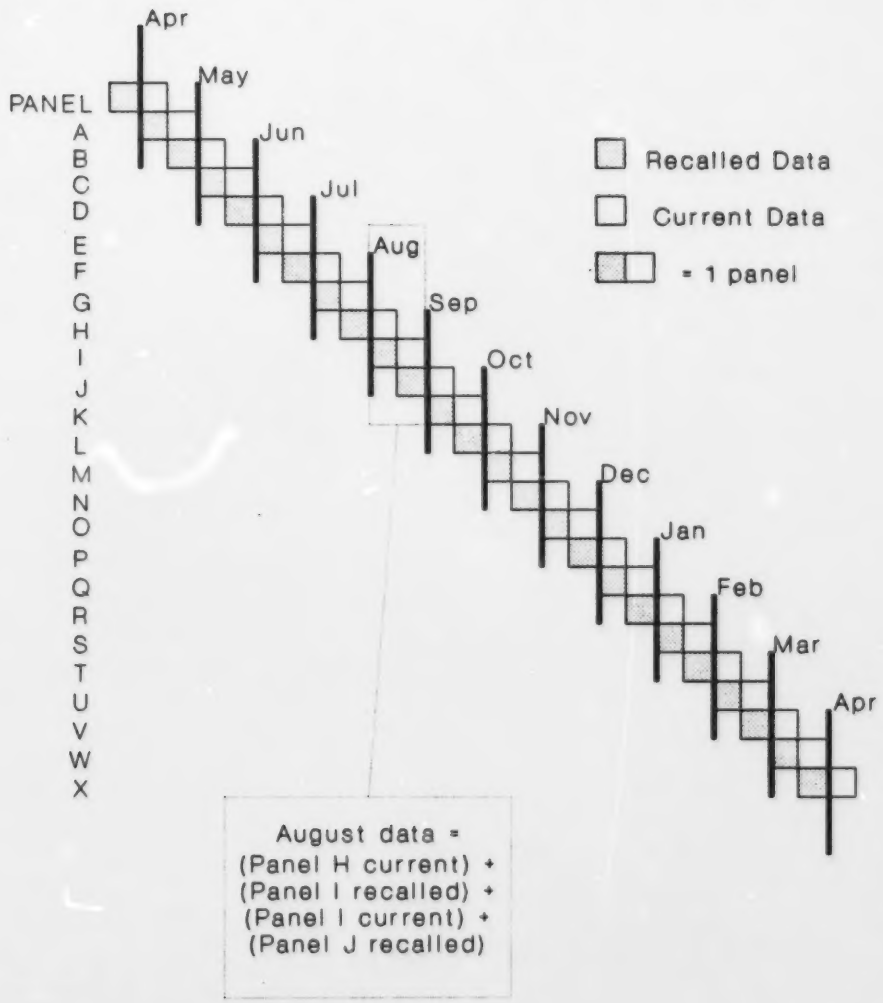
Common Name	Scientific Name
Chinook	*Oncorhynchus tshawytscha*
Coho	*Oncorhynchus kisutch*
Pink Salmon	*Oncorhynchus gorbuscha*
Other salmon	*Oncorhynchus spp.*
Lingcod	*Ophiodon elongatus*
Rockfish	*Sebastes spp.*
Halibut	*Hippoglossus stenolepis*

APPENDIX B

STATISTICAL AREA MAP

APPENDIX C

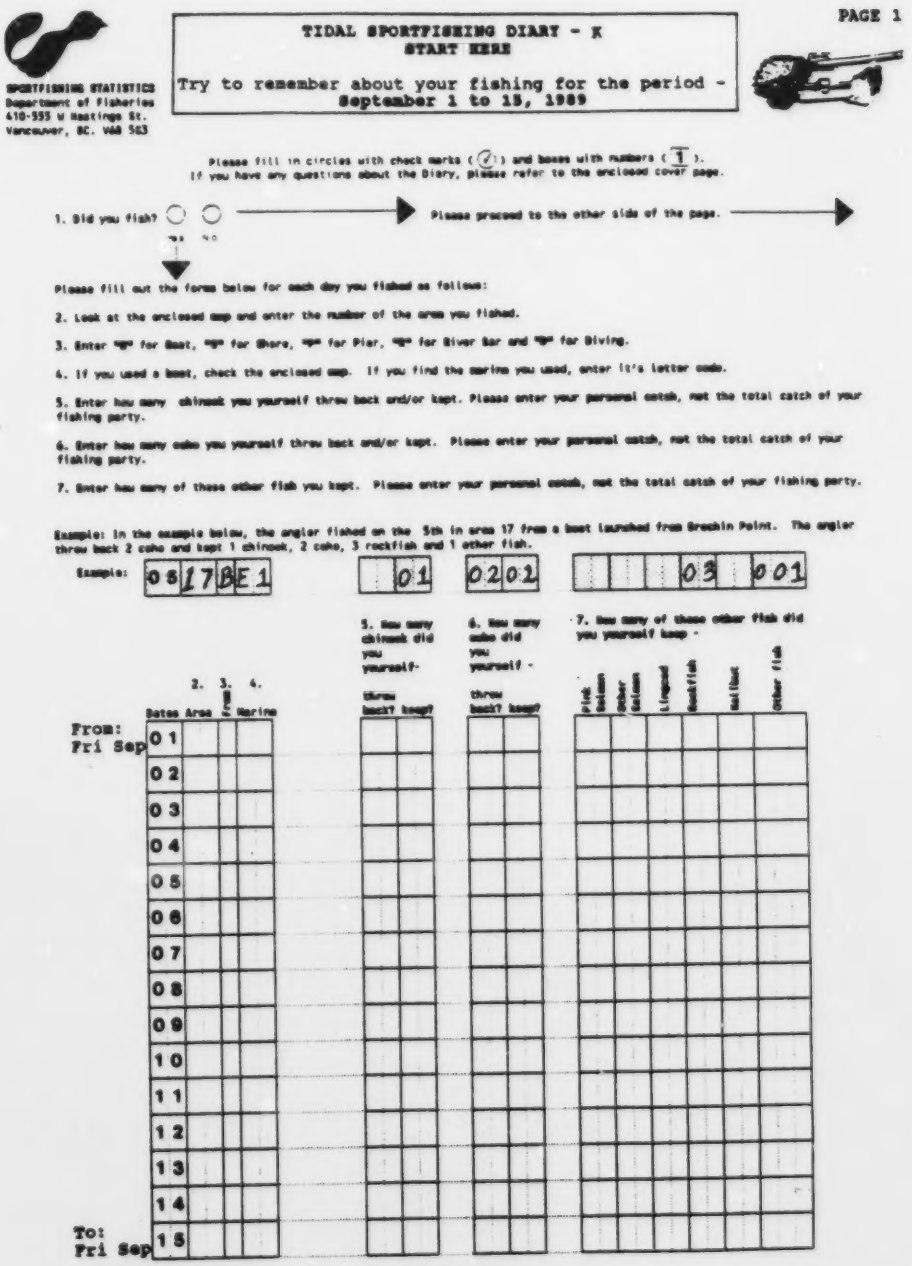
TIDAL SPORTFISHING DIARY PROGRAM - PANEL PRESENTATION



APPENDIX D

FORM SAMPLES

1. Tidal Sportfishing Diary - Page 1



SPORTFISHING STATISTICS
Department of Fisheries
410-555 W Hastings St.
Vancouver, BC. V6B 5G3

TIDAL SPORTFISHING DIARY - K
START HERE

Try to remember about your fishing for the period - **September 1 to 15, 1989**

PAGE 1

Please fill in circles with check marks (✓) and boxes with numbers (1).
If you have any questions about the Diary, please refer to the enclosed cover page.

1. Did you fish? ○ Yes ○ No → Please proceed to the other side of the page.

Please fill out the forms below for each day you fished as follows:

2. Look at the enclosed map and enter the number of the area you fished.

3. Enter "B" for Boat, "S" for Shore, "P" for Pier, "R" for River Bar and "D" for Diving.

4. If you used a boat, check the enclosed map. If you find the marina you used, enter it's letter code.

5. Enter how many chinook you yourself threw back and/or kept. Please enter your personal catch, not the total catch of your fishing party.

6. Enter how many coho you yourself threw back and/or kept. Please enter your personal catch, not the total catch of your fishing party.

7. Enter how many of these other fish you kept. Please enter your personal catch, not the total catch of your fishing party.

Example: In the example below, the angler fished on the 5th in area 17 from a boat launched from Brentwin Point. The angler threw back 2 coho and kept 1 chinook, 2 coho, 3 rockfish and 1 other fish.

Example: 05 | 17 | B | E | 1 | | | 01 | 02 | 02 | | | | 03 | 001

From: Fri Sep	Dates	2. Area	3. Type	4. Marina	5. How many chinook did you yourself- throw back?	5. kept?	6. How many coho did you yourself - throw back?	6. kept?	7. How many of these other fish did you yourself keep - Pink Salmon	Other Salmon	Lingcod	Rockfish	Halibut	Other fish
	01													
	02													
	03													
	04													
	05													
	06													
	07													
	08													
	09													
	10													
	11													
	12													
	13													
	14													
To: Fri Sep	15													

GO TO THE NEXT PAGE

Fisheries and Oceans / Pêches et Océans

Canada

1. Tidal Sportfishing Diary - Page 2

PAGE 2

TIDAL SPORTFISHING DIARY - K

Please fill out this page as you go fishing from - September 16 to 30, 1989

Please fill in circles with check marks (✓) and boxes with numbers (1).
If you have any questions about the Diary, please refer to the enclosed cover page.

1. Did you fish? ○ yes ○ no → Thank you for your cooperation. Please mail back the diary after the last date on this form.

Please fill out the forms below for each day you fished as follows:

2. Look at the enclosed map and enter the number of the area you fished.

3. Enter "B" for Boat, "S" for Shore, "P" for Pier, "R" for River Bar and "D" for Diving.

4. If you used a boat, check the enclosed map. If you find the marina you used, enter it's letter code.

5. Enter how many chinook you yourself threw back and/or kept. Please enter your personal catch, not the total catch of your fishing party.

6. Enter how many coho you yourself threw back and/or kept. Please enter your personal catch, not the total catch of your fishing party.

7. Enter how many of these other fish you kept. Please enter your personal catch, not the total catch of your fishing party.

Example: In the example below, the angler fished on the 25th in area 17 from a boat launched from Brechin Point. The angler threw back 2 coho and kept 1 chinook, 2 coho, 3 rockfish and 1 other fish.

Example: 25 | 17 | B | E1 | | 01 | 02 | 02 | | | | 03 | | 001

Dates	2. Area	3. Type	4. Marina	5. How many chinook did you yourself- throw back?	5. keep?	6. How many coho did you yourself - throw back?	6. keep?	7. How many of these other fish did you yourself keep - Pink Salmon	Other Salmon	Lingcod	Rockfish	Halibut	Other fish
From: Sat Sep 16													
17													
18													
19													
20													
21													
22													
23													
24													
25													
26													
27													
28													
29													
To: Sat Sep 30													

Thank you for your time and cooperation.

2. Visitor Sportfishing Survey - Page 1

1989/90
VISITORS SPORTFISHING SURVEY

1. Did you fish in B.C. tidal waters during the 1989/90 licence year (April 1989 - March 1990)?
(Please check one of the circles).

Yes ○ ○ No → Thank you for your cooperation. Please mail back the questionnaire in the return envelope provided.

↓

Please fill out the form below as follows:

2. **MONTH:** Record the month(s) you fished in B.C. tidal waters during 1989/90. Please use one row for each different month.

3. **AREA:** Refer to the Statistical Area Map below. Locate the area(s) where you were fishing and record the area number. If you fished in more than one area during a month, use a separate line for each area and record the days fished and catch for each different area.

4. **# OF DAYS:** Record the number of days you fished in each area and month. **Include the days where nothing was caught.**

5. **SALMON:** Record the number of fish **you yourself** kept in the appropriate column. **Please enter your personal catch, not the total catch of your fishing party.** Record **king** and **spring** salmon in the "chinook" column and **silver** in the "coho" column.

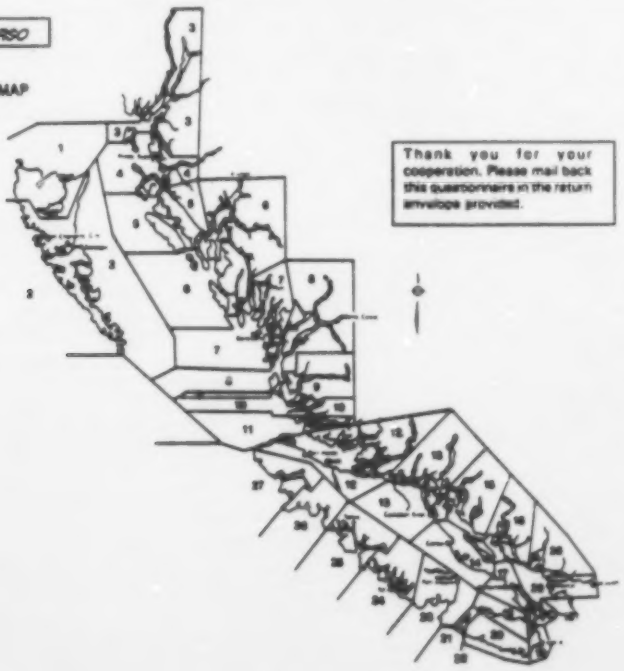
6. **OTHER FISH:** Record the number of fish **you yourself** kept in the appropriate column. **Please enter your personal catch, not the total catch of your fishing party.**

Example: In the example below, the angler fished during July in Area 13 for 4 days. Two chinook, 1 pink and 4 rockfish were caught and kept.

	2. MONTH	3. AREA	4. # OF DAYS	5. SALMON				6. OTHER FISH			
				Chinook	Coho	Pink	Chum	Halibut	Rockfish	Lingcod	Other
Example:	JULY	13	4	2		1			4		

FRANCAIS AU VERSO

STATISTICAL AREA MAP



Thank you for your cooperation. Please mail back this questionnaire in the return envelope provided.

2. Visitor Sportfishing Survey - Page 2

1989/90
ENQUÊTE SUR LA PÊCHE SPORTIVE
PRATIQUE PAR LES VISITEURS

1. Avez-vous pêché dans les eaux à marée de la C.-B. au cours l'année du permis (avril 1989 - mars 1990)?
(Faites une coche dans le cercle approprié.)

Oui ○ ○ Non → Nous vous remercions de votre collaboration. Veuillez nous retourner le questionnaire dans l'enveloppe-réponse fournie à cette fin.

↓

Prière de remplir le formulaire en suivant les indications ci-dessous.

2. MOIS: Inscrivez les mois où vous avez pêché dans les eaux à marée de la C.-B. au cours de 1989-90. Employez une ligne pour chaque mois.

3. SECTEUR: Reportez-vous à la carte des secteurs statistiques ci-dessous. Trouvez les secteurs dans lesquels vous avez pêché et consignez-en le numéro. Si vous avez pêché dans plus d'un secteur au cours du mois, employez une ligne distincte pour chaque secteur et inscrivez dans chaque cas les jours où vous avez pêché et vos prises.

4. NO. DE JOURS: Indiquez le nombre de jours où vous avez pêché dans chaque secteur et le mois. Comptez également les jours où vous n'avez rien pris.

5. SAUMON: Inscrivez dans la colonne appropriée le nombre de poissons que vous-même vous avez gardés. Indiquez vos prises personnelles, plutôt que celles de tout le groupe.

6. AUTRES POISSONS: Inscrivez dans la colonne appropriée le nombre de poissons que vous-même vous avez gardés. Indiquez vos prises personnelles, plutôt que celles de tout le groupe.

Exemple: Dans l'exemple ci-dessous, le pêcheur a pêché quatre jours en juillet dans le secteur 13. Il a pris et gardé deux quinnats, un saumon rose et quatre stelbettes.

	2. MOIS	3. SECTEUR	4. NO. DE JOURS	5. SAUMON				6. AUTRES POISSONS			
Exemple:	JUILLET	13	4	2		1			4		

ENGLISH ON REVERSE

LA CARTE DES ZONES STATISTIQUES

Nous vous remercions de votre collaboration. Veuillez nous retourner le questionnaire dans l'enveloppe-réponse fournie à cette fin.